

SEP 13 1988

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**ACTION MEMORANDUM - Ceiling Increase Request for the Removal Action
at the Dayton, Ohio (Site Spill ID#9A)**

Valdas V. Adamkus
Regional Administrator

EPA Region 5 Records Ctr.



242139

J. Winston Porter, Assistant Administrator
for Solid Waste and Emergency Response (OS-100)

THRU: Timothy Fields, Jr., Director
Emergency Response Division (OS-210)

PURPOSE

The purpose of this memorandum is to request an increase of \$1,220,086 in the authorized ceiling on the removal action at the Dayton Tire and Rubber Company site in Dayton, Ohio. Approval of this request will increase the current ceiling of \$4,276,000, as approved by you on September 8, 1987, to a new ceiling of \$5,496,086. Continued response actions at this site require additional funds in order to complete the project.

BACKGROUND

On April 3, 1987, the Ohio Environmental Protection Agency (OEPA) reported that there had been a release of up to 1,600 gallons of oil from four large transformers into Wolf Creek at the abandoned Dayton Tire and Rubber Company facility in Dayton, Ohio. The response action taken by the OEPA soon reached the limits of spending authority by the State agency due to the presence of polychlorinated biphenyls (PCBs) in the oil, and assistance from the United States Environmental Protection Agency (U.S. EPA) was requested.

An On-Scene Coordinator (OSC) was dispatched and arrived on scene during the evening of April 3, 1987. He was verbally authorized to expend up to \$40,000 of Federal funds to supplement the response action.

The OSC found many transformer and capacitors located inside the Dayton Tire Company building and on its roof. Many had been drained, and there were substantial amounts of PCB oil on the floors of the building. The building also contained a substantial quantity of asbestos-insulated piping in poor condition. There was considerable evidence of vandalism in the building. Due to the unanticipated widespread contamination found in the building, the cost of characterizing and controlling the site was greater than estimated. The OSC requested an additional \$10,000, which was verbally approved on April 7, 1987.

On April 14, 1987, the OSC returned to the site because precipitation had caused additional oil discharges to the stream. On April 15, 1987, an additional \$40,000 was verbally approved to control these new discharges. These new discharges could not be attributed to drained transformers, so a search was made to determine the source. A large network of underdrains and sewers, with a small pump station which drains the area beneath and around the building, was found. This system was heavily contaminated and discharged oil whenever there was significant precipitation.

On April 17, 1987, an additional \$200,000 was verbally authorized to control discharges from the drainage system, initiate cleanup of the building, and complete extent of contamination surveys. Other initial actions to stabilize the site included sealing the doorways and openings and placing visqueen sheets over the broken windows to reduce the discharge of airborne asbestos from the site.

On July 6, 1987, an additional \$516,000 was authorized by the Regional Administrator to remove PCB-contaminated segments from Wolf Creek, which resulted from spills from the Dayton Tire & Rubber Company site. The fish in Wolf Creek and the Great Miami River were found to be contaminated with PCB concentrations as high as 18 ppm.

SITE-SPECIFIC CONTRACT

On September 8, 1987, your office approved a waiver of the \$2,000,000 statutory limitation on removal actions and this increased the ceiling from \$806,000 to \$4,276,000. This money was used to initiate a site-specific contract with PEI Associates, Inc., to clean up the site. Under the site-specific contract the following activities were completed and conclusions were made:

1. A total of 40 cubic yards of bulk asbestos and debris have been removed from the site.
2. A total of 8,442 linear feet of lightly damaged asbestos on pipes has been encapsulated.
3. A total of 201 cubic yards of PCB-contaminated sediments and soils from Wolf Creek have been disposed at an off-site landfill.
- 3A. A total of 832 cubic yards of PCB-contaminated [<500 parts per million (ppm)] soils from the site have been disposed of.
4. A total of 90,000 square feet of PCB-contaminated surfaces have been decontaminated.
5. A total of 41 PCB transformers have been decontaminated and disposed of.
6. A total of nine PCB capacitors have been disposed of and 34 electrical switches have been decontaminated.
7. A total of 33 cubic yards of transformer metal bands have been decontaminated. Those remaining were found to be non-contaminated.
8. A total of three buried tanks have been excavated and decontaminated.
9. A total of 450 cubic yards of PCB-contaminated debris has been disposed of at an off-site landfill.
10. A total of 14,168 gallons of PCB-contaminated oil has been treated using the Niagara-Mohawk KPEG unit.
11. A total of 75,000 gallons of PCB-contaminated water has been treated.
12. A total of 26,863 gallons of hazardous liquids and sludges has been treated or disposed off site.

13. A dioxin extent of contamination survey report, prepared by PEI Associates, Inc., has been submitted to the U.S.EPA. This report indicates that there is minimal dioxin contamination. The dioxin present at this site is a mixture of chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzo-furans (CDFs) resulting from the burning of PCBs. These substances are not RCRA wastes. As stated in the Summary of the "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of CDDs and CDFs," EPA/625/3-87/012: "(A) reasonable estimate of the the toxic risks associated with a mixture of CDDs and CDFs can be made by taking into account the distribution of CDD/CDF congeners or homologues and the likely relative toxicity equivalence factors (TEFs). According to the dioxin extent of contamination study, the 2,3,7,9 TCDD isomer was not detected in any of the samples. In no case did the 2,3,7,8 TCDD toxicity equivalence factor, as applied to other congeners of CDDs and CDFs at the site, exceed 1 ppb, therefore, this value is below the level of concern for the Dayton Tire site using the toxicity equivalence factors. These minimal levels of dioxin will, however, be removed as the PCB-contaminated areas are cleaned.
14. Based on the dioxin extent of contamination survey report, construction of the dioxin storage vault that was originally anticipated has been cancelled.
15. The PCB extent of contamination survey shows extensive contamination or spillage and extensive, but scattered, contamination in "walk out" areas.
16. The 90 days of site management, provided under the current contract, were expended by April 2, 1988.
17. PCB-contaminated drains have been identified by smoke testing. Two lines are considered contaminated. Some 540 feet of pipe require decontamination.
18. Details of the Wolf Creek clean-up and containment measures undertaken in the Dayton Tire facility are addressed in the attached \$2 million exemption action memorandum of September 8, 1987.

ADDITIONAL ACTIONS REQUIRED

During the above clean-up activity additional asbestos and PCB contamination was discovered. Additional friable asbestos must be removed because the original survey underestimated the amount to be removed. Also, additional PCB-contaminated soil, found during the extent of contamination study, must be removed. This soil was discovered outside the main building during routine soil sampling. A trench was dug 3 feet by 7 feet and to a depth of 7 feet to confirm the concentration and amount. It was discovered during excavation of the trench that the concentration of PCB increases with depth instead of decreasing as originally assumed.

Additional actions are required at the site to complete the scope of work authorized in the action memorandum you signed on September 8, 1987; specifically, the surface removal of PCB and asbestos. This work was further defined through the extent of contamination surveys performed during the site-specific contract.

The following additional activities are required:

1. Removal of an additional 400 cubic yards of asbestos is estimated. 50 cubic yards of this asbestos is located in the powerhouse, which can be isolated by bricking the doors and windows for approximately \$17,000. This isolation of the asbestos, compared to complete removal of the asbestos, will result in a cost savings of \$166,085. Although the City wants the asbestos completely removed, the CERCLA prohibition of removal of asbestos in structures precludes the removal of the undisturbed non-friable asbestos in this situation. Region V has met with the City of Dayton on two occasions, had several telephone conversations, and otherwise kept the City informed of plans to address the asbestos. Most of this communication involved the Assistant City Manager for Community Services and the Northwest Community Council.
2. Removal of 800 cubic yards of PCB-contaminated soil, generated as a result of spillage from transformer areas D and E is needed. Analytical work from these soils indicated PCB levels above 500 ppm. The estimated clean-up contractor costs for this action is \$150,000. This task will be performed under the Region V ERCS contract.
3. One large electrical switch containing PCB-contaminated fluid must be disposed of. There was no provision for this in the site-specific contract.

4. PCB-contaminated surfaces with concentrations between 10 ug/100 sq. cm and 100 ug/100 sq. cm must be encapsulated under the PCB Spill Policy.
5. Approximately 300 gallons of PCB-contaminated oils and sludges were found in varying quantities in over 80 drums. Disposal of this material is required.
6. It is estimated that an additional 10,000 square feet of building surface will require decontamination.
7. A total of 2,895 gallons of oil contaminated with PCB must be incinerated. The Niagara Mohawk KPEG treatment process is more cost-effective than incineration down to approximately 20 ppm. To treat to below 2 ppm, as required by the PCB Disposal Policy, KPEG becomes more costly than incinerate this material.
8. PCB-contaminated water that will be created by the additional surface decontamination must be treated for disposal.
9. An estimated 540 linear feet of underground drain pipe must be flushed to remove PCB contamination.

THREAT

The threats described in the exemption request signed by your office on September 8, 1987, still exist at this site. There are still large amounts of loose and friable asbestos in the building that can escape off-site. Although, these windows are currently covered with visqueen, this temporary cover will degenerate and tear allowing winds to blow through the broken windows and disperse asbestos. Friable asbestos is a known human carcinogen and produces mesotheliomas and lung carcinomas after inhalation.

PCB-contaminated soils still remain at the site. The underground drain system has not been decontaminated. Any run-off from the building that passes through the drainage system will carry PCBs into Wolf Creek again.

PCBs are persistent hazardous substances that can cause short-and long-term health effects. They are known to bio-accumulate in the food chain and are suspected human carcinogens.

The continued nature of the threat at the Dayton Tire and Rubber Company, as specified in the attached \$2 million exemption request is serious enough that it is of a time-critical nature. The requested ceiling increase does not represent a change in the scope of work; it is an extension of work previously committed to for a surface removal at the site.

ENFORCEMENT

The Dayton Tire & Rubber Company was a whole-owned subsidiary of Firestone Tire & Rubber Company when it went out of business. The site was sold to J-V Properties during July 1981. A lien is currently being prepared for filing. The property itself, which is in metropolitan Dayton, has considerable value. Unilateral Administrative Orders were issued to all apparent potentially responsible parties. The Firestone Tire & Rubber Company inspected the site but declined to participate in the clean-up. The J-V Properties and Machinery Merchants Inc. did not respond to the order. Appropriate cost recovery actions will be taken against the potentially responsible parties.

STATUTORY CRITERIA

The original \$2 million exemption request action memorandum describes how this site meets the statutory criteria in Section 104 (c) (1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986. This document is attached for your review. The conditions described in that memorandum still apply.

1. Continued response actions are immediately required to mitigate an emergency.

The site still contains 400 cubic yards of loose, friable asbestos. This asbestos will be subject to wind dispersion to the environment through the thousands of broken windows as the visqueen covers degenerate. A residential area exists approximately 50 yards from the site. Friable asbestos is a known human carcinogen and produces mesotheliomas and lung carcinomas after inhalation.

Approximately 800 cubic yards of contaminated soils still remain at the site. Analytical work from these soils indicate PCB levels above 500 ppm. A large electrical switch containing PCB fluid remains at the site. Concrete surfaces with PCB concentrations between 10 ug/100 sq. cm and 100 ug/100 sq. cm must be encapsulated because it is required under the PCB Spill Policy (40 CFR Part 751) for low contact, indoor

impervious surfaces. The PCB policy requires spills in restricted access areas to be cleaned to 25 ppm PCB. The PCB-contaminated soil still poses a threat to migrate to the adjacent surface water, Wolf Creek, where acceptable levels of PCB contamination in fish have been detected.

Approximately 300 gallons of PCB-contaminated oils and sludges were found at the site in about 80 drums during the site-specific contract work.

PCBs are persistent hazardous substances that can cause short and long-term health effects. They are known to bioaccumulate in the food chain and are suspected human carcinogens.

The exemption request approved by your office on September 8, 1988, discussed the emergency mitigation required by dioxin at the site. During the site-specific contract work, the extent of contamination study found that dioxin contamination is less than the level of concern for a non-residential area; therefore, no emergency mitigation is required for the dioxin.

2. There is an immediate risk to the public health and the environment.

The friable asbestos can still easily be released through the thousands of broken windows and open bay doors. This constitutes an immediate risk to the nearby residential population. Friable asbestos is a known human carcinogen and produces mesotheliomas and lung carcinomas after inhalation.

High concentrations of PCB remain in 800 cubic yards of soil and this poses an immediate risk to the public health and the environment because the PCB is still capable of migrating to Wolf Creek. The other PCB-contaminated material still on the site, the switch, the oils and the sludges, constitute a direct contact threat to persons gaining unauthorized access to the site or access following EPA's departure. Migration of these materials to the nearby stream will also present a direct contact threat. These materials should be removed under paragraph 300.65 of the National Contingency Plan.

3. Such assistance will not otherwise be provided on a timely basis.

The DEPA has exhausted its authority to expend emergency funds on the site. None of the potentially responsible parties have indicated a willingness to undertake the work. During the initial response, a number of actions were taken to temporarily abate the threats presented by the site.

These involved sealing the doorways and openings and placing visqueen sheets over the broken windows to reduce the discharge of airborne asbestos from the site; and sealing all roof drains to minimize flow into the drainage system. The visqueen will not survive severe winter weather. The pump station will eventually fill up and overflow, even though flow has been minimized. Freezing and thawing will damage the pump station and the roof, which will be flooded due to the blocked drains. This will eventually lead to weakening or collapse of the roof and to discharge from the pump station.

CONSISTENCY WITH LONG-TERM REMEDIAL ACTION

Section 104(a)(2) of CERCLA, as amended by SARA, requires that removals must "contribute to the efficient performance of any long-term remedial action." This proposed action will remove all of the PCB-contaminated material from the site and will either remove, encapsulate or isolate all friable asbestos on the site, therefore, eliminating the threat of off-site migration of hazardous contamination. The action will enable the City of Dayton, or some other entity, to demolish and/or redevelop the property using normal demolition, asbestos removal and construction techniques. It, therefore, contributes to the efficient performance and is consistent with any long-term action that may take place at the site.

1. What is the long-term clean-up plan for the site?

The City of Dayton has indicated that it will condemn and develop the property. This will include the demolition of the present structure. ~~Some~~ non-friable asbestos will remain, which will have to be addressed during demolition or resale of the property.

2. Which threats will require action prior to the start of long-term action?

The threat of PCB discharge from the site, the direct contact threat from PCBs on the site, and the threat of airborne as-

bestos to personnel on the site and the surrounding community require attention.

3. How far should the removal action go to assure that the threats are adequately abated?

The removal action should remove, stabilize or isolate all hazardous materials on the site that may migrate or present direct contact threats to personnel on the site. Specifically, the removal action must remove PCB-contaminated materials and prevent the release of airborne asbestos.

4. Is the proposed action consistent with the long-term remedy?

Yes. The completion of the removal action will enable the City of Dayton, or some other entity, to demolish and/or redevelop the property, using normal demolition, asbestos and construction techniques. It, therefore, contributed to the efficient performance and is consistent with any action that may take place on the site.

PROPOSED ACTION AND COST

The action does not change the scope of work for the Dayton Tire and Rubber Company site. The \$2 million exemption request (Attachment I) details the increase funding requested for the clean-up contractor in order to bring this removal to completion.

Attachments III and IV detail the funding history for this site, and list the proposed increase in costs for the Technical Assistance Team (TAT) and the U.S. EPA. Estimated costs to complete the project are as follows:

	Current Ceiling	Proposed Change	Proposed Ceiling
Contractor - -	\$2,784,000	\$650,757	\$3,434,757
Contingency	437,600	77,613	515,213
Subtotal	\$3,221,600	\$728,370	\$3,949,970
TAT	316,400	60,000	376,400
Extramural Subtotal	\$3,538,000	\$788,370	\$4,326,370
Extramural Contingency	253,000	395,956	648,956
Extramural Total	\$3,791,000	\$1,184,326	\$4,975,326
U.S. EPA Direct Costs	\$ 168,000	\$ 13,800	\$ 181,800
U.S. EPA Indirect Costs	317,000	21,960	338,960
PROJECT TOTAL	\$4,276,000	\$1,220,086	\$5,496,086

RECOMMENDATION

Because conditions at the Dayton Tire and Rubber Company site in Dayton, Ohio, meet the National Contingency Plan Section 300.65 criteria for a removal action and the Section 104 (c)(1) criteria for the waiver of the \$2 million limitation on removal actions, I recommended the ceiling be increased from \$4,276,900 to \$5,496,026.

Original Signed by:
Frank M. Covington

Valdas V. Adamkus

APPROVED: _____ DATE: _____
ASSISTANT ADMINISTRATOR
FOR SOLID WASTE AND EMERGENCY RESPONSE

DISAPPROVED: _____ DATE: _____
ASSISTANT ADMINISTRATOR
FOR SOLID WASTE AND EMERGENCY RESPONSE

ATTACHMENTS (3)

bcc: D. Ouderkirk, WH-548B

C. Taylor, PH-214F

~~W. Reynolds, SPA-14~~ Mary Crook, SPA-14

L. Fabinski SHS-11

F A R Y A N

V.ADAWKUS:CS:SHS-11:ERS:9/30/88:EDITOR#1:DAYTON.MEM

ATTACHMENT III

Dayton Tire and Rubber Company Overall Project Budget Summary

Actual Costs Prior to Site-Specific Contract

EXCS	\$ 451,930.31
TAT	120,000.00
U.S. EPA	indicated below
	\$ 571,930.31

Estimated Costs of Site-Specific Contract as of April 2, 1988

PEI	\$2,336,432.80
TAT	220,142.60
U.S. EPA (Total to Date)	225,000.00
	\$2,781,575.40

Total Project Costs to Date	\$3,139,920.54
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Estimated Costs to Complete Project

Non-Asbestos Related	\$ 348,325.00
Asbestos Related	750,000.00
Subtotal	\$1,098,325.00
Contingency	515,213.00
Subtotal	\$1,613,538.00
TAT	60,000.00
Extramural Subtotal	\$1,673,538.00
Extramural Contingency (15%)	648,956.00

TOTAL EXTRAMURAL COSTS	\$2,322,494.00
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U.S. EPA Direct	
(360 hrs + 10% HQ hrs) x \$30	\$ 13,800.00
U.S. EPA Indirect (360 hrs) x \$61	\$ 21,960.00

TOTAL INTRAMURAL COSTS	\$ 35,760.00
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TOTAL ADDITIONAL COSTS TO COMPLETE	\$2,358,254.00
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TOTAL REQUESTED PROJECT CEILING	\$5,496,086.00
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CURRENTLY APPROVED CEILING	\$4,276,000.00
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REQUESTED INCREASE	\$1,220,086.00
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RECOMMENDATION

Because conditions at the Dayton Tire and Rubber Company site in Dayton, Ohio, meet the National Contingency Plan Section 300.65 criteria for a removal action and the Section 104 (c)(1) criteria for the waiver of the \$2 million limitation on removal actions, I recommended the ceiling be increased from \$4,276,000 to \$5,496,036.

Valdas V. Adamkus

APPROVED: _____ DATE: _____
ASSISTANT ADMINISTRATOR
FOR SOLID WASTE AND EMERGENCY RESPONSE

DISAPPROVED: _____ DATE: _____
ASSISTANT ADMINISTRATOR
FOR SOLID WASTE AND EMERGENCY RESPONSE

ATTACHMENTS (3)

bcc: D. Ouderkirk, WH-548B
C. Taylor, PM-214F
W. Reynolds, SPA-14
L. Fabinski SHS-11

V.ADMKUS:CS:SHS-11:ERS:8/30/88:EDITOR#1:DAYTON.MEH

Handwritten notes and signatures:
- *sf 9/1/88*
- *RFB 8/31*
- *RK 9/6/88*
- *W6 OSF 9/6/88*
- *sf 9/6/88*
- *sf 9/7/88*
- *GRA 9/12/88*

Attachment III

Dayton Tire and Rubber Company
Overall Project Budget Summary

Actual Costs Prior to Site-Specific Contract

ERCS	\$ 451,930.31
TAT	120,000.00
U.S. EPA	indicated below
	\$ 571,930.31

Estimated Costs of Site-Specific Contract as of April 2, 1988

PEI	\$2,336,432.80
TAT	220,142.60
U.S. EPA	(Total to Date) 225,000.00
	\$2,781,575.40

Total Project Costs to Date	\$3,139,920.54
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Estimated Costs to Complete Project

Non-Asbestos Related	\$ 348,325.00
Asbestos Related	750,000.00
Subtotal	\$1,098,325.00
Contingency	515,213.00
Subtotal	\$1,613,538.00
TAT	60,000.00
Extramural Subtotal	\$1,673,538.00
Extramural Contingency (15%)	251,030.70
TOTAL EXTRAMURAL COSTS	\$2,322,494.00

DRH
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9/13/88

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SIF 8/30/88